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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,566	09/26/2001	Thomas P. McKenna JR.	4000.2.74	7438
32641 7590 12/20/2007 DIGEO, INC C/O STOEL RIVES LLP 201 SOUTH MAIN STREET, SUITE 1100 ONE UTAH CENTER SALT LAKE CITY, UT 84111			EXAMINER HUYNH, SON P	
			ART UNIT 2623	PAPER NUMBER
			MAIL DATE 12/20/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/966,566	Applicant(s) MCKENNA, THOMAS P.	
	Examiner Son P. Huynh	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,9-41 and 45-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,9-41 and 45-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/31/07</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/31/2007 has been entered.

Response to Arguments

1. Applicant's arguments with respect to claims 1-5, 9-16, 37-41, 45-52 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues the cited reference do not teach or suggest that actions are encapsulated within a PIO as program code (page 16, paragraph 3-page 18, paragraph 2). This argument is respectfully traversed.

Bruck discloses a top box includes hardware and software for receiving and decoding a broadcast video signal. The set top box also includes a browser program, which may be implemented in hardware and software, to cause a graphical user interface to be displayed on television. The browser program enables a user to access

various WebTV network services, browser the World Wide Web, send email, or otherwise access the Internet (col. 3, lines 47-56. The CPU execute software designed to implement various features of the present invention (col. 4, lines 18-20). One feature of set top box is provision of an electronic programming guide for television viewing. The electronic program guide is an electronic database on the client which is periodically updated by the host server. The electronic program guide also can include links to website associated with various shows...(col. 4, lines 55-col. 5, lines 15, col. 5, lines 34-60, col. 6, lines 5-15, lines 42-65). HTML formatted web page may be employed as a user interface template for use in quickly creating a desired user interface. The user interface may be customized based on the particular episode, show, network, network affiliate or other consideration (see include, but are not limited to, col. 8, line 44-col. 9, line 62). The user can select particular interactive icons/functions such as record, reminder, link to web site, etc. on the web page (e.g., web page for particular show, particular episode, particular network, or particular network affiliate, etc. to perform a predetermined functions (see include, but are not limited to, figures 12-13, col. 7, line 1- col. 8, 9, line 67). Therefore, the PIO is interpreted as a user interface/webpage for particular show, episode, or network affiliate, etc. and each PIO must be encapsulating a plurality of actions to be performed in connection with the signal television program (e.g., show, episode, or program in particular network affiliate), wherein each o the actions are represented within the PIO as program code (e.g., program code in user interface/web page that cause a graphical user interface within record icon, reminder icon, chat icon, etc. to be displayed) so that the icons are

displayed and when selected, a predetermined functions are performed (note: the icon displayed without program code only when the icon is drawn/printed on paper/newspaper, which is not applied in Bruck reference since Bruck disclose user interface/web page are created and the functions are performed using computer software/computer applications, etc.). Therefore, Bruck discloses each PIO encapsulating a plurality of actions to be performed in connection with the single television program, wherein each of the actions are represented within the PIO as program code (interpreted as each of the user interface, web page comprises a plurality of actions such as record, remind, etc. to be performed in connection with a television program (e.g., "3rd Rock from the Sun", or "Dr. Katz, Professional Therapist", etc., wherein each of the actions such as record, remind, link to associated web page, etc. are represented within the user interface as program code for that cause the user interface/web page and icons associated with the actions to be displayed).

Applicant further argues the cited references do not teach or suggest displaying the icons encapsulated within a plurality of PIOs in a single graphical user interface (page 18, paragraph 3-page 19, paragraph 2). This argument is respectfully traversed.

Brucks discloses electronic programming guide/user interface for electronic program guide including scheduling information, rating, and other information about the television shows available to the user. The electronic programming guide also include links to websites associated with various shows (col. 4, line 55-col. 5, line 2). The user can

access program guide for a current day, access the previously described program information interface and access a television favorites mode where still images from multiple channels are displayed simultaneously on separate small areas of the screen... (col. 8, line 44-col. 9, line 6). Bruck further discloses when a particular show, network affiliate, or program associated with network affiliate/channel is selected, the user interface associated with the selected network affiliate icon, show icons, etc. are displayed and this user interface includes image, logo, icon of the channel/network affiliate of the selected channel/network affiliate (see include, but are not limited to, col. 7, line 44-col. 8, line 24, col. 8, line 60-col. 9, line 6, figures 6, 8). Thus, "a plurality of PIOs in a single graphical user interface" is interpreted as plurality of user interface/web pages in a single program guide/user interface of user favorite mode. The displayed icons (including still images) of channels/network affiliates (e.g., NBC, HBO, etc.), titles, etc. displayed in the program guide/user interface of user favorite modes must be encapsulated in a plurality PIOs (user interface/web page associated shows, network facility) so that when a particular icon/logo associated with channel, network facility, or channel is selected from the electronic program guide/user interface of user favorite mode, the icon/logo of the selected, the icons, logo, title, etc. of displayed on the user interface/web page associated with the selected icons. (Applicant is respectfully suggested to refer to US 6,938,208, figures 7-11; US 5,903,314: figures 5, 20; US 6,348,932: figure 10 for clarification of program guide displaying plurality of icons, including still images of channels, logo, etc. and when the icon is selected, a user

interface/web page/window associated with the selected icon is displayed to provide additional information/content associated with the selected icon).

Applicant further argues Bruck does not teach or suggest the recited method of initiating PIO actions. Particularly, Bruck does not disclose displaying supplemental content related to a television program. Bruck doesn't display a plurality of icons representing different PIOs. Bruck does not allow a user to select a particular PIO via a displayed icon. Bruck does display, in response to one of the icons being selected, a context menu listing the actions available for the associated PIO, one of the actions being configured to display supplemental content (pages 19-22). This argument is respectfully traversed.

By arguing "Bruck does display, in response to one of the icons being selected, a context menu listing the actions available for the associated PIO, one of the actions being configured to display supplemental content" (page 20, paragraph 2), the Applicant admits that Bruck discloses the user selects particular PIO via a displayed icon and displaying supplemental content.

In particular, Bruck discloses displaying plurality of icons representing different PIOs (displaying icons of still images, logos, title, etc. for different show, channel, network affiliates, etc. on television program guide or program guide in user favorite mode) (see include, but are not limited to, col. 8, line 61-col. 9, line 56 and discussion above). When a particular icon (e.g., still image, title, or network affiliate logo, etc.) on the electronic program guide/user interface in user favorite mode is selected, the user

interface, web page associated with the selected icon is displayed, this user interface, web page comprises links such as link to chat room, web site, etc.; the user selects one of the link to display supplement content such as chat room, content from web site scheduling, etc. related to selected television program, show, etc. (see include, but are not limited to, figures 5-7, 12-14; col. 6, line 42-col. 8, line 24).

For the reasons given above, rejections of claims are discussed below.

Claims 17-36 and 53 have been withdrawn.

Claims 6-8, 42-44, 54-55 have been canceled.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 9-16, 37-41, 45-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bruck et al. (US 7,143,428 B1), in view of Kanungo (US 2003/0056215 A1).

Regarding claim 1, Bruck discloses a method for providing supplemental information (e.g. chat, logo, title, information from web site, etc.) related to a television program (see include, but is not limited to, figures 5-9, 12-13), the method comprising:

storing a plurality of PIOs within a memory of an entertainment system (e.g. storing web pages which may be employed as a user interface templates in memory – see include, but is not limited to, col. 9, lines 32-57), each PIO comprising a single data structure for representing a single respective television program (each user interface/web page comprises structure of web page employed as user interface template for representing a single show, episode or program on particular network affiliate (e.g., NBC), etc., see include, but are not limited to, col. 5, lines 34-48, col. 6, lines 43-56, col. 7, line 17-col. 9, line 67), each PIO (user interface or web page associated with particular channel, network affiliate, show) encapsulating:

attribute data for one or more attributes providing information about a single television program, at least one attribute comprising a link to supplemental information related to the television program (the formatted web page comprises attributes data such as program title, time, rated, or web site, etc. providing information about a single television program (e.g. Dr. Katz, Professional Therapist), the attribute comprising at least one link to chat room, web site, etc. related to the show or the program being tuned – see include, but are not limited to, figure 12, col. 4, line 60-col. 5, line 2),

a plurality of actions to be performed in connection with the single television program, wherein each of the actions are represented within the PIO as program code

(a plurality of actions such as link to web site, record, remind, etc. to be performed in connection with a single show, or program in particular network affiliate, etc., each of the actions such as link to website, record, remind, etc. are represented by icons within the user interface/web page as program code (e.g., program code of software, of HTML application, etc.) that cause the user interface and the icons to be displayed and the actions to be performed – see include, but are not limited to, col. 3, lines 50-52, col. 4, lines 18-22, col. 4, line 55-col. 5, line 15, lines 35-65, col. 6, lines 8-15, lines 42-57, col. 7, line 1-col. 9, line 67, and discussion in the "Response to Arguments" above);

program code comprises, for each action, a routine in a machine format that is executable in a machine within the interactive television system and any destination device to which the PIO is sent in order to perform the associated user selected action (interpreted as and program code (e.g. HTML code, or program code), that are executable by the device/CPU in the set top box/computer to perform predetermined function such as record, remind, link, etc. the program code of software or web page downloaded and executable by destination device that the web page is sent in order to performed user selection action such as record, link to web site, etc. - see include, but is not limited to, figures 1-4, 12-13, col. 3, lines 46-56, col. 4, lines 14-20, col. 5, lines 3-38, col. 6, lines 5-20, lines 42-65, col. 7, lines 1-25, col. 9, lines 32-67);

graphical data for display as an icon to visually represent the PIO within a graphical user interface (GUI), the GUI being other than a grid-based electronic program guide (EPG) including rows corresponding to television channels (e.g., data for display as still images in separate small areas, title icon, network affiliate icon, etc.

representing the web pages, employed as user interface templates, of display screen – see include, but are not limited to, figures 4-7, 12-13, col. 8, line 61-col. 9, line 3 and discussion in “Response to Arguments” above);

displaying the icons representing the plurality of PIOs in the GUI (displaying still images in separate small areas, title icons, network affiliate logos, etc. representing the plurality of web page in the display screen/electronic program guide, user favorite mode screen – see include, but are not limited to, see include, but are not limited to, col. 8, line 61-col. 9, line 3 and discussion in “Response to Arguments” above);

in response to a user picking an icon of the selected PIO within the GUI, displaying a context menu listing the one or more actions associated with the selected PIO, at least one of the actions for displaying supplemental information related to the associated television program (e.g., in response to user selection of a small area. that display the still image of channel/logo icon of network affiliate, channel icon, title icon, etc. within the display screen, displaying a web page associated with the selected small area, network affiliate logo, title, etc. the web page listing record, remind, link, or chat room, etc. associated with web page of the show, web page of the affiliate, etc., at least one of the actions for displaying chat room, website, etc. related to the television program, show, network affiliate, etc. see include, but are not limited to, see include, but are not limited to, figures 6-10, 12-13, col. 4, lines 64-col. 5, line 2, col. 6, line 42-col. 7, line 25, col. 7, lines 44-57, col. 8, line 61-col. 9, line 3, and discussion in “Response to Arguments” above);

in response to the action for displaying supplemental information being selected from the context menu, using the at least one attribute corresponding the link to retrieve the supplemental referenced by the link (e.g., in response to user selection of chat icon, web site, etc. using attribute (e.g., title, network, etc.) corresponding to the link to website, chat room, etc. to retrieve chat content, web site content, etc. referenced by the link – see include, but are not limited to, figures 6-12, col. 4, lines 64-col. 5, line 2, col. 6, line 42-col. 7, line 25, col. 7, lines 44-57)

displaying the retrieved supplemental information in the GUI(e.g. displaying additional information of the program, information from the web site, or chat room information, etc. on television screen – see include, but is not limited to, figures 1, 3, 6-12, col. 7, lines 44-67, col. 8, lines 44-60, col. 9, lines 45-57).

However, Bruck does not explicitly disclose the program code comprises a routine in a machine independent format that is executable in a Java virtual machine within the interactive television system and any destination device to which the PIO is sent such that the routine does not need to be installed on the destination device prior to receiving the PIO in order to perform the associated user-selected action.

Kanungo discloses the program code comprises a routine in a machine independent format that is executable in a Java virtual machine within the interactive television system and any destination device to which the PIO is sent such that the routine does not need to be installed on the destination device prior to receiving the PIO in order to perform the associated user-selected action (program code comprise routine in Java applet, platform independent bytecodes, that is executable in Java virtual

machine (108) within the interactive television system or any destination device (e.g., set top box and television display) to which the Java applet/bytecodes is sent such that the routine does not need to be installed on the set top box, or other destination device prior to receiving web page or any program interface object in order to perform the associated user selectable action such as on/off, TV/video tv, broadcast cable, 25%, 50%, etc. – see include, but are not limited to, figures 1a-3b, 4a-4d, 6-8b, paragraphs 0010, 0034-0036, 0040-0041, 0043-0044, 0050-0052, 0055, 0058-0060). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bruck with the teaching as taught by Kanungo in order at least to easily change the appearance and functionality of virtual remote control without having modify the hardware and software that is built into the platform on which the applet is executed (see paragraphs 0009, 0011, 0083).

Regarding claim 2, Bruck in view of Kanungo teaches a method as discussed in the rejection of claim 1. Bruck further discloses in response to user selection of a link for supplemental information such as access web site, access chat room, etc., information from the web site, chat content, etc. are provided to the user – see including, but is not limited to, figures 4, 6-12, col. 7, lines 26-67). Inherently, a communication is established with a supplemental information server (i.e. remote server, host server, or chat server– figures 4, 6, 9-12), supplemental information referenced by the link is requested from the supplemental information server and received by the entertainment

system so that the content from web page, or content from chat room is displayed on the screen – see include, but is not limited to, figures 6,9-12, col. 7, lines 44-67).

Regarding claim 3, Bruck in view of Kanungo teaches a method as discussed in the rejection of claim 2. Bruck further discloses the supplemental information server comprises an Internet server (see include, but is not limited to, figure 4, col. 6, lines 8-65).

Regarding claim 4, Bruck in view of Kanungo teaches a method as discussed in the rejection of claim 1. Bruck further discloses the link comprises the URL (see include, but is not limited to, col. 6, line 66-col. 7, line 5).

Regarding claim 5, Bruck in view of Kanungo teaches a method as discussed in the rejection of claim 1. Bruck further discloses the link comprises a file name (e.g. data file, web page, or chat room, etc. see include, but is not limited to, col. 6, line 42-col. 7, line 16, figure 12).

Regarding claim 9, Bruck in view of Kanungo teaches a method as discussed in the rejection of claim 1. Bruck further discloses automatically displaying the supplemental information in response to the television program being presented by the entertainment system (e.g., automatically discloses information of chat room, program title, logo, or web site, etc. associated with the selected television – see include, but is not limited to,

figures 5-12, col. 7, line 10-col. 8, line 60, col. 9, line 22-col. 10, line 3, col. 10, lines 41-45).

Regarding claim 10, Bruck in view of Kanungo teaches a method as discussed in the rejection of claim 1. Bruck further discloses automatically display the supplemental information television program prior to television program being presented by the entertainment system (e.g., a reminder automatically appears prior to the start of the show, or automatically change the link to the chat room for the next show playing on that network – see include, but is not limited to, col. 8, 18-21, lines 56-60; col. 10, lines 59-67).

Regarding claim 11, Bruck in view of Kanungo teaches a method as discussed in the rejection of claim 1. Bruck further discloses the displaying comprises:

launching a browser configured to display the supplemental information (launching a browser configured to display web page, or chat room, etc. – see include, but is not limited to, col. 3, lines 61-56, col. 6, lines 8-20, lines 42-50, col. 6, line 66-col. 7, line 58, col. 9, lines 32-67); and

displaying the supplemental information within the browser (e.g. displaying chat information, or web page content, etc. within the formatted web page/user interface, see figures 6-13).

Regarding claim 12, Bruck in view of Kanungo teaches a method as discussed in the rejection of claim 1. Bruck further discloses the PIO comprises a set of link attributes, each link attribute comprising a different link to a set of supplemental information (the formatted web page/user interface comprises a set of link attributes such as link to web site, link to chat room, etc., each link attribute comprises a different link such as link to associated chat room, or link to associated web site, etc. – see include, but is not limited to, figure 12).

Regarding claim 13, Bruck in view of Kanungo teaches a method as discussed in the rejection of claim 12. Bruck further discloses displaying a list of link attribute associated with the PIO (e.g. display link attribute such as chat link, or web site link, etc. associated with the formatted web page/user interface, see include, but is not limited to, figure 12); and receiving a user selection of a particular link attribute from the list of link attribute (i.e. receiving user selection of link to chat room, link to web site, etc. – see include, but is not limited to, figure 12).

Regarding claim 14, Bruck in view of Kanungo teaches a method as discussed in the rejection of claim 1. Neither Bruck nor Kanungo specifically discloses the supplemental information comprises an XML document. Official Notice is taken that using XML document is well known in the art. For example, using XML document/code for web page. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bruck in view of Kanungo with the teaching of XML.

document in order, at least, to allow the creator to create customized tags for a display, or to provide a simple language and easily to learn the language.

Regarding claim 15, Bruck in view of Kanungo teaches a method as discussed in the rejection of claim 1. Kanungo further discloses the PIO comprises a JavaBean object (see include, but are not limited to, paragraphs 0011-0013, 0034, figures 5a-6).

Regarding claim 16, Bruck in view of Kanungo teaches a method as discussed in the rejection of claim 1. Bruck further discloses the entertainment system is selected from the group consisting of a personal computer, an interactive television (ITV) system (see include, but is not limited to, col. 3, lines 34-55, col. 4, lines 55-67, col. 6, lines 8-20).

Regarding claims 37-41, 45-51, the limitations of the system as claimed correspond to the limitations of the method as claimed in claims 1-5, 9-15, and are analyzed as discussed with respect to the rejection of claims 1-5, 9-15.

Regarding claim 52, the limitations as claimed correspond to the limitations of claim 37, and are analyzed as discussed with respect to the rejection of claim 37.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Reichardt (US 6,938,208 B2) discloses electronic program guide with graphic program listings.

Arai et al. (US 6,751,401) discloses method and apparatus for producing program information and receiving apparatus for processing the information in a broadcast system.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son P. Huynh whose telephone number is 571-272-7295. The examiner can normally be reached on 9:00 - 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher S. Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Son P. Huynh

December 19, 2007

A handwritten signature in black ink, appearing to read 'Son P. Huynh', with a stylized flourish at the end.